## Missouri Department of Health and Senior Services Onsite Sewage Program APPLICATION FOR VARIANCE

**Please Print** PROPERTY OWNER (FIRST NAME MI LAST) APPLICATION NUMBER PROPERTY OWNER (FIRST NAME MI LAST) COUNTY SITE ADDRESS CITY STATE ZIP CODE MO MAILING ADDRESS (IF DIFFERENT) CITY STATE ZIP CODE TELEPHONE NUMBER ALTERNATE TELEPHONE NUMBER FAX NUMBER YEAR LOT WAS PLATTED YEAR EXISTING SYSTEM WAS CONSTRUCTED. SYSTEM IS: NEW REPAIR/REPLACEMENT LIST REQUESTED VARIANCE(S) SEPARATELY; CHECK THE APPROPRIATE BOX AND COMPLETE DETAILS. UNABLE TO COMPLY WITH MINIMUM SETBACK DISTANCE(S) REQUIRED BY RULE: DISTANCE FROM PART OF SYSTEM: SITE FEATURE: SHOULD BE: REQUESTED SETBACK: TO **FEET** FEET: TO FEET; FEET TO FEET; **FEET** TO FEET; **FEET** (BEDROCK OR OTHER RESTRICTIVE FEATURE) UNABLE TO COMPLY WITH THE MINIMUM SEPARATION **DISTANCE REQUIRED BY RULE BETWEEN THE ABSORP-**TION TRENCH BOTTOM, OR DRIP EMITTERS, AND: **VERTICAL SEPARATION DISTANCE SHOULD BE:** REQUESTED SEPARATION IS: INCHES. INCHES: UNABLE TO COMPLY WITH THE MINIMUM SOIL TREATMENT (ABSORPTION) AREA REQUIRED BY RULE: TREATMENT AREA SHOULD BE: REQUESTED ACTUAL TREATMENT AREA IS: SQ. FT. (MIN); SQ. FT. HOW WILL THE SYSTEM PROTECT PUBLIC HEALTH, DRINKING WATER, GROUNDWATER, AND SURFACE WATER? PROVIDE NAME(S) AND MAILING ADDRESS(ES) OF POTENTIALLY AFFECTED ADJACENT PROPERTY OWNER(S). ATTACH, WITH A SITE LAYOUT DIAGRAM, TO YOUR ONSITE SEWAGE SYSTEM CONSTRUCTION PERMIT APPLICATION. ATTENTION PROPERTY OWNER'S STATEMENT: By signing this application I/we are requesting the variance(s) listed above and I/we acknowledge and agree: If approved, the variance(s) will reduce the normally required separation distances and/or size of the onsite wastewater treatment system. This proposed system must be operated properly and receive regular maintenance to insure it will protect health and the environment. I/we agree to properly operate and maintain the system and to comply with all conditions of variance and permit approval. PROPERTY OWNER'S SIGNATURE DATE PROPERTY OWNER'S SIGNATURE DATE

## 19 CSR 20-3.060(1)(D) Table 1-Minimum Set-Back Distances

| Minimum Distance From                           | Sewage Tank <sup>1</sup> | Disposal Area <sup>2</sup> | Lagoons |
|---|--------------------------|----------------------------|---------|
| Private water supply well <sup>3</sup>          | (feet)                   | (feet)                     | (feet)  |
| Tirrate water suppry wen                        | 50                       | 100                        | 100     |
| Public water supply well                        | 300                      | 300                        | 300     |
| Cistern   | 25                       | 25                         | 25      |
| Spring  | 50                       | 100                        | 100     |
| Classified stream, lake or impoundment*         | 50                       | 50                         | 50      |
| Stream or open ditch <sup>4</sup>               | 25                       | 25                         | 25      |
| Property lines                                  | 10                       | 10**                       | 75      |
| Building foundation                             | 5                        | 15                         | 15[100] |
| Basement  | 15                       | 25                         | 25[100] |
| Swimming pool                                   | 15                       | 15                         | 15      |
| Water line under pressure                       | 10                       | 10                         | 10      |
| Suction water line                              | 50                       | 100                        | 100     |
| Upslope interceptor drains                      | -                        | 10                         | 10      |
| Downslope interceptor drains                    | =                        | 25                         | 25      |
| Top of slope of embankments or cuts of two feet |                          |                            |         |
| (2') or more vertical height                    | -                        | 20                         | 20      |
| Edge of surficial sink holes                    | 50                       | 100                        | 500     |
| Other soil absorption system except repair area | =                        | 20                         | 20      |

<sup>\*</sup> A classified stream is any stream that maintains permanent flow or permanent pools during drought periods and supports aquatic life.

One site/soil limitation for onsite wastewater treatment systems (OWTS) is vertical separation. Vertical separation is defined as the distance between the absorption trench bottom and a limiting condition, such as a seasonal high water table, bedrock or a restrictive horizon. Vertical separation requirements are in place to ensure a zone of at least provisionally suitable, unsaturated soil to adequately renovate the applied wastewater before it is recycled into groundwater or surface waters. The table below summarizes the minimum vertical separation requirements.

## **Vertical Separation Table**

| TYPE of SYSTEM    | SITE/SOIL LIMITATION<br>or CHARACTERISTIC        | VERTICAL SEPARATION<br>(FEET) |
|-------------------|--|-------------------------------|
| CONVENTIONAL      |  | 2                             |
|                   | Rapid percolation                                | 4                             |
|                   | Cherty clays in areas of concern for groundwater | 4                             |
| Serial            |  | 3                             |
| Dosed D-box       |  | 2                             |
| Shallow placement |  | 2                             |
| LPP               |  | 1                             |
|                   | Areas of concern for groundwater                 | 4                             |
| DRIP              |  | 1                             |
| SAND MOUND        |  | 2                             |
|                   | Groundwater contamination potential              | 4                             |
| LAGOON            | Creviced bedrock                                 | 3                             |
|                   | Or a minimum clay liner thickness of:            | 1                             |

<sup>\*\*</sup> Recommend twenty-five feet (25') of downslope property line initially, but repair may be allowed to ten feet (10') of downslope property line.

<sup>&</sup>lt;sup>1</sup> Includes sewage tanks, intermittent sand filters and dosing chambers.

<sup>&</sup>lt;sup>2</sup> Includes all systems (sand filter, wetland and the like) except wastewater stabilization ponds.

<sup>&</sup>lt;sup>3</sup> Unplugged abandoned wells or wells with less than eighty feet (< 80') of casing depth shall have one-hundred-fifty feet (150') minimum distance from all above.

<sup>&</sup>lt;sup>4</sup> Sewage tanks and soil absorption systems should never be located in the drainage area of a sinkhole. [The minimum setbacks for lagoons are 100 feet from the residence it serves and 200 feet from other existing residences.]